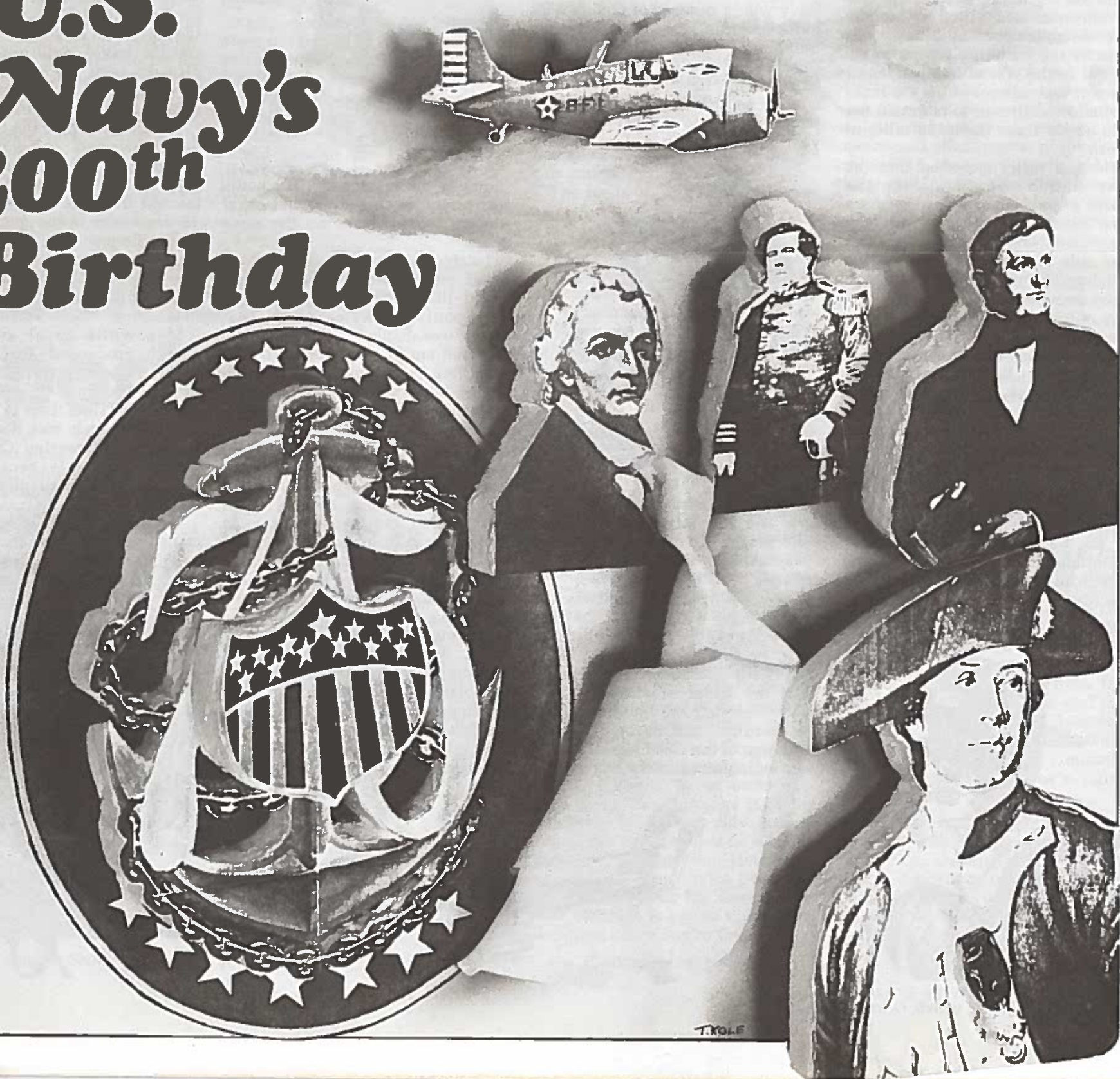


GRUMMAN
plane
news

Vol. 34, No. 18, Bethpage, N.Y., October 10, 1975

U.S.
Navy's
200th
Birthday



Navy celebrating 200th birthday



When the U.S. Navy celebrates its 200th Anniversary on October 13, it can look back to a tradition that in two centuries has equalled or exceeded the triumphs of naval powers that measure their history in millennia.

The importance of sea power to U.S. security was demonstrated from the beginning, even as the new nation was struggling to become free. Establishment of a navy was seen by the founding fathers as essential in the War of Independence, since it was control of the sea lanes that allowed Britain to maintain her rule across three thousand miles of ocean.

No one really expected that the new nation would defeat the world's greatest sea power in its own element. Yet the fledgling American Navy with its 14 ships was able to inflict on the British a number of embarrassing defeats. Most notable perhaps was the victory of John Paul Jones and his ship the *Bonhomme Richard* over the British *Serapis*. In that battle, which took place in British home waters, the captain of the *Serapis* asked Jones "Are you striking your colors?", and was answered by the American's immortal reply, "I have not yet begun to fight."

The most significant naval engagement of the war took place during the climactic confrontation at the Battle of Yorktown. Many historians claim that the key to the American victory at Yorktown was the British naval defeat at the hands

of French Admiral D'Estaing, who prevented the British fleet from supporting Cornwallis at Yorktown. With this victory, the allied French and American forces were able to cut off Cornwallis' escape to the sea, and the fall of Yorktown was assured. After Yorktown, British determination to continue prosecution of the war crumbled.

It would be at least another century, though, before the U.S. Navy would help make the U.S. a global power. The War of 1812 confirmed the supremacy of Great Britain when challenged almost exclusively in its own element. The war proved both militarily inconclusive and extremely costly.

Despite the odds, however, the Navy won a number of famous victories including Captain Isaac Hull's defeat of the British frigate *Guerriere* by the *Constitution*. That battle won the *Constitution* its famous sobriquet, "Old Ironsides," which it bears to this day. Almost a year later Captain Oliver Hazard



Perry was to sum up his own victory over the British squadron on Lake Erie with the classic phrase, "We have met the enemy and they are ours."

The Civil War saw a greatly expanded Navy carrying out the vital naval blockade of the southern ports. By depriving the South of the materiel it needed to prosecute the war, the naval blockade significantly speeded the reunification of the country. The Battle of Vicksburg, one of the most decisive of the war, won control of the Mississippi

for the Union and cut the Confederacy in half.

The war also demonstrated the importance of new technology. Almost 50 years after the Navy launched the world's first fully steam-powered warship, the *Robert Fulton*, that technology came into its own off the coast of secessionist Virginia. On March 9, 1862 the world's first ironclad naval battle was fought between the *Monitor* and the Confederate ship *Virginia*

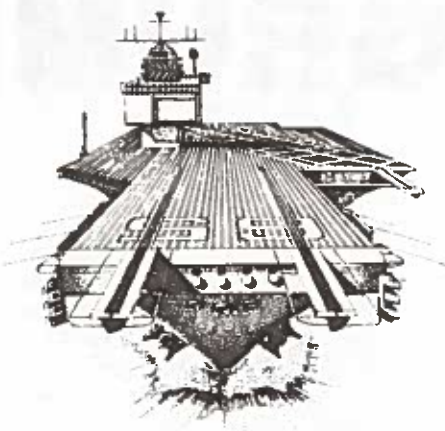


(formerly the *Merrimack*). The battle was pretty much a draw, but naval warfare would never be the same again.

Thirty-six years later, when U.S. naval power first burst upon the world like a new constellation in the Spanish American War, that power was displayed in steel ships, powered entirely by steam. Though the Civil War could have demonstrated to any alert foreign observers that the U.S. was a power to be reckoned with (the Union Army alone was probably the greatest in the world at the time), it was only later, with the growth of U.S. naval power to world rank, that the nation was able to exert an influence in proportion to its growing power.

Slightly over a century after the U.S.'s first, unhappy European entanglement in the War of 1812, six American destroyers steamed into Queenstown, Ireland, on May 4, 1917. From that day forward, despite brief, unsuccessful attempts at isolationism, America found that Europe's and the world's problems would also be hers.

The first World War witnessed a number of naval firsts, among them:



the first U.S. ship to sink an enemy submarine, and most notably, the first naval aviator to become a flying ace: Lieutenant (jg) David S. Ingalls flying a Sopwith Camel over Nieuport shot down his fifth enemy aircraft in six weeks.

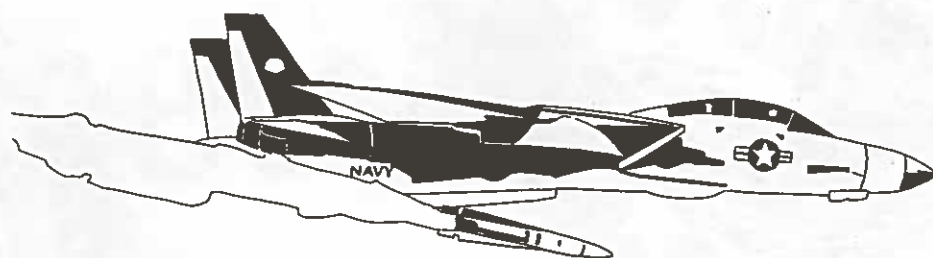
The two decades between the world wars were lean ones for the Navy as they were for the other services. Though money was tight, the Navy was able to continue work on its naval aviation program, already seen by some farsighted Navy planners as the key to naval supremacy in the future.

A rebuilt collier, the *Jupiter*, was commissioned the *Langley* on March 20, 1922, thus becoming the Navy's first carrier. The lessons learned from the *Langley* bore fruit 12 years later in the commissioning of the *Ranger*, the first carrier designed as such from the keel up. The *Ranger* was followed by larger carriers, the *Enterprise*, the *Wasp*, the *Hornet*, and the *Yorktown*.

Meanwhile naval aviation research proceeded apace. Folding airplane wings were developed, making easier stowage aboard carriers possible. One of the leaders in this research was the Grumman Aircraft Engineering Corporation, which had only recently been founded in a small plant on Long Island.

Improved catapult systems, air-cooled engines, more accurate bomb

(Continued on page 10)





WASHINGTON, D.C.—The growing debate that's surrounding the selection of a new lightweight fighter for the U.S. Navy has heightened in recent weeks—the LTV Aerospace Corporation (an associate with General Dynamics on the F-16) lost its protest to the General Accounting Office that the selection by the Navy of the McDonnell/Northrop F-18 went contrary to the rules established originally for the lightweight fighter by Congress ... Grumman officials are asking Congress to take a much closer look at the LWF selection, which has been

touted as having somewhat less performance than the F-14 but costing only half as much as the Grumman fighter, because they believe a closer scrutiny would establish the real effectiveness and economic comparison between what is Fleet proven, the F-14, and what is still a future design, the F-18 ... the Senate Subcommittee on Tactical Air Power is hearing witnesses to try and sort out fact from fiction on the dispute.

And though the House Appropriations Committee voted 29-21 two weeks ago to continue funding

the development of the Navy F-18 and the full House backed up that decision last week, claims and counter-claims are still reverberating through the halls of Congress, with no one having a clear indication of what the final outcome might be.

One thing is sure—the stakes are high. A favorable decision by Congress would mean billions of dollars in hardware contracts over the next decade for the companies selected, and for the communities surrounding those facilities there would be an additional economic fallout—the promise of thousands of added jobs to fulfill the production contracts.

For the nation, however, the consideration is much more vital: Once the rhetoric has subsided and the smoke of verbal battle cleared away, will the United States have the most formidable plane it needs to counter a growing Soviet air threat.

As PLANE NEWS went to press earlier this week, George Spangenberg, a widely-recognized expert on military aerospace affairs, was scheduled to present his views on the issue on October 8 to the Senate subcommittee chaired by Senator Howard Cannon of Nevada.

On that same day, Board Chairman Joe Gavin is slated to follow Spangenberg in testifying before the committee.

The seeds of the present dilemma

were sown back in the early Seventies when the full impact of the inflation that had been building in the nation hit the F-14 program. The Navy, which had planned to build more than 700 of the new swing-wing fighters, cut back procurement on the F-14 and began a search for a low-cost alternative for the fleet.

In all of its studies prior to 1974, the Navy determined that the F-14, or a variant of the Tomcat, was more cost-effective and more operationally effective than any of the proposed alternatives. In May of 1974, however, the Congress provided funds to the Department of Defense to allow an investigation to determine if a derivative of the Air Force lightweight fighter could fill the Air Combat Fighter role for the Navy.

Key to funding that investigation was the assurance that a version of either of the proposed Air Force lightweight fighters (YF-16 or YF-17) could be bought for approximately half the cost of an F-14, with the additional economic benefit of commonality in parts, systems, etc., with the Air Force selection. Although it was acknowledged at that time that neither of the lightweight fighters could match the operational effectiveness of the F-14 or the F-15, the concept was sold on the general belief that the sharply lower costs would enable the Navy to make up for that operational deficiency by putting more planes in the air.

Later in 1974, DOD increased total procurement of the F-14 to 390 but the Department of Defense also stretched out the planned production to 1981 from 1978, a decision that would later result in the reported \$2 million average price rise on the plane.

After the Air Force had selected the General Dynamics' F-16 as its lightweight fighter in January 1975, the Navy surprised Congressional and industry officials a few months later when it announced its selection of the F-18 as its choice to fulfill the lightweight fighter role. Since the F-18 represented a significant design change from either the F-16 or F-17 prototypes that were considered by the Air Force, its development would involve a substantial increase in cost from the original intent of Congress, and the selection of the F-18 also lessened the stated objective of that search—that is, aircraft commonality with the Air Force's lightweight fighter.

LTV Aerospace Corporation filed a protest with the General Accounting Office, claiming that the selection of the F-18 by the Navy was not in conformation with the original intent of Congress or the stated objectives of the competition.

(Continued on page 11)

(Continued on page 4)

president's report

I know that all of you are aware of the growing controversy in Washington concerning the F-18 program and what it could mean to our company and to each one of us. For the



George Skurla

past few years, the Department of Defense has been spurring a drive to produce a "half-cost" lightweight fighter to supplement the F-14, an obviously attractive goal to an already economy-conscious nation. Naturally, the emergence of a "half-cost" lightweight fighter could curtail F-14 production—not immediately, but certainly within the next five years—so this issue has to be of major importance to all of us.

As more and more light is shed on the proposed lightweight fighter program, it is becoming increasingly evident that the F-18 will not only be much less capable than the F-14, it will be considerably more expensive, too. And though the Navy has been our biggest and best customer for nearly 50 years, and we certainly hope to continue that productive relationship, we have decided to speak out against the selection of the F-18 because we firmly believe it is in the best interest of the nation and the Grumman Company to do so.

We are compelled to tell our story in Washington because we continue to be baffled by the determination of the Department of Defense to keep pursuing the so-called lightweight fighter—no matter what the true cost.

Since the F-14 is admittedly a "superior fighter," according to Vice Adm. W.D. Houser, Deputy Chief of Naval Operations for Air, the "paper" F-18's principal appeal has been advertised to be in the area of economics. But a hard, realistic look at the facts shows that this isn't true, either. In the past six months we have witnessed—through the Government's own figures—the program cost for the first 128 planes soar to approximately \$34 million a copy! Even should it reach full production, the cost of 480 F-18s, by the Navy's own estimates, would be about a billion dollars more expensive than it would be to purchase 480 more F-14s in addition to the 390 already planned.

The other area in which the F-18 is also claimed to be more economical by its supporters is in the life-cycle cost. But on close examination this claim cannot be substantiated by the economic facts. Considering the debt service (the huge interest payments the Government must continue to pay on the billions of dollars it borrows to finance F-18



(Continued from page 3)

While LTV's action signalled a growing storm of protest over the Navy's selection, the report that sparked the most criticism was one prepared by the White House's Office of Management and Budget (OMB). In evaluating the savings estimated for the new lightweight fighter, an OMB report stated:

"The procurement of 480 F-18s will cost about \$0.9 billion more than procurement of 480 additional F-14s."

"The life-cycle cost of a program of 800 F-18s, when compared to a mix of F-14s and A-7s, cannot be amortized under the most favorable assumptions in less than nine years. If discounting is applied, there is no amortization within the foreseeable future."

Senator Barry Goldwater of Arizona, a member of the Senate Subcommittee on Tactical Air Power, expressed his concern to his associates in Congress that the nation was, in effect, "buying a paper airplane" and that the Department of Defense was departing from its stated policy of "fly-before-buy" on the F-18 program.

He, too, pointed out that Congress had directed the Navy to pursue a derivative of the YF-16 or YF-17 suitable for carrier operations for the specific purpose of achieving commonality and the expected production savings that objective would achieve. Because of the F-18 selection by the Navy, he stated, "We are probably not going to achieve our less total-cost and our commonality goal. We now need to also thoroughly examine the possibility of satisfying the Navy's requirements with other alternatives. Maybe we will find there are none acceptable but, nevertheless, we need to look."

Continuing on that subject, Goldwater observed: "I think we need to examine the requirement for 800 total F/A-18 aircraft split between fighter and attack versions. When the program unit costs for the F-18 are pegged against an 800 total, they are relatively favorable as

compared to the F-14. However, I think we need to separate, for costing purposes, these two versions and for examining the Navy's fighter requirement, 400 F-18s should be compared against an equivalent effective force of F-14s. I don't know what that number (of F-14s) is, but it should not be 400. It might be that 332 F-14s is the number we are looking for since the current 390 (planes planned for the) program plus 332 equals 722, the number of F-14s in the original

"It is not strictly a matter of determining how many more F-14s can be bought with the money needed for 400 F-18s. The question is: What is the cost comparison, including life-cycle, between equivalent forces? We need to know how many F-18s it will take to equal the effectiveness of one F-14. After that determination is made then we can work on the cost comparison."

Senator Barry Goldwater

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Though there is growing concern that the F-18 program will not provide the nation with the low-cost fighter that Congress had demanded or that there will not be commonality with the Air Force's lightweight fighter, no one has expressed those concerns in such blunt terms as George Spangenberg. Once the top man in the Navy's aviation branch and now a consultant to the Navy since his retirement in 1973, Spangenberg has hit hard at the lightweight fighter concept for at least two years, calling the quest "ill advised" and "an impossible dream." Spangenberg, who was

scheduled to appear before the Senate subcommittee earlier this week, has been reiterating his opinion expressed to the same committee two years ago. At that time he said that "We must seek solutions to the F-14 price problem within the program. The preferred solution is to buy the airplanes at a higher rate. If development funds are to be spent they should be applied to the airplane in a way to reduce total program price, and not to develop less capable alternatives."

Appearing before the Subcommittee of the House Armed Services Committee on April 9, 1975, Spangenberg stated: "I cannot support the NACF as it is now defined since I believe a greater capability at a lower cost is already available to us." In reviewing the history of the F-14 and the price rise in the early Seventies that caused disenchantment within the top echelon of the Department of Defense, Spangenberg cited the various investigations since then to find a suitable alternative to the F-14, beginning in 1971 when the F-15 was proposed as a possible replacement. His contention is still the same as it was two years ago—up the production rate on the F-14, drive down the unit cost, and the nation will be

provided with the best fighter at the lowest price.

He summed up his appearance before the House committee by saying: "I believe that the NACF concept is unsound and should not be supported. We should use the funds to increase our procurement of F-14s and A-7s ... Our funds are much too scarce too squander them on any program which fails to meet reasonable cost-effectiveness goals."

The concern expressed by Spangenberg is much the same as that of other air-warfare experts. They believe that the F-18, acknowledged to be a considerable degree below the operational effectiveness of the F-14, will be unable to counter a growing Soviet air threat, one that shows a clear trend toward larger, longer-range aircraft that makes possible the incorporation of long-range radar and larger air-to-air missiles. The F-14 is considered to have radically changed air-warfare tactics and planning. The Tomcat's track-while-scan,

long-range radar enables the F-14's air crew to detect, track, and select for destruction up to six targets with its multi-shot missile capability, at ranges over 100 miles.

An opposing view on the F-18 was presented recently by Vice Adm. William Houser, Deputy Chief of Naval Operations (Air Warfare), when he testified before the Senate Subcommittee on Tactical Air Power. He defended the Navy's decision to buy the F-18 on the grounds that it had met the basic criteria established for the competition: namely, that it was capable of carrier operations; able to fight on favorable terms with projected threat attack of the 1980s; serve as a complement to existing F-14 aircraft; have lower procurement and operating costs than the F-14; and, through multi-role employment, permit a reduction in aircraft types.

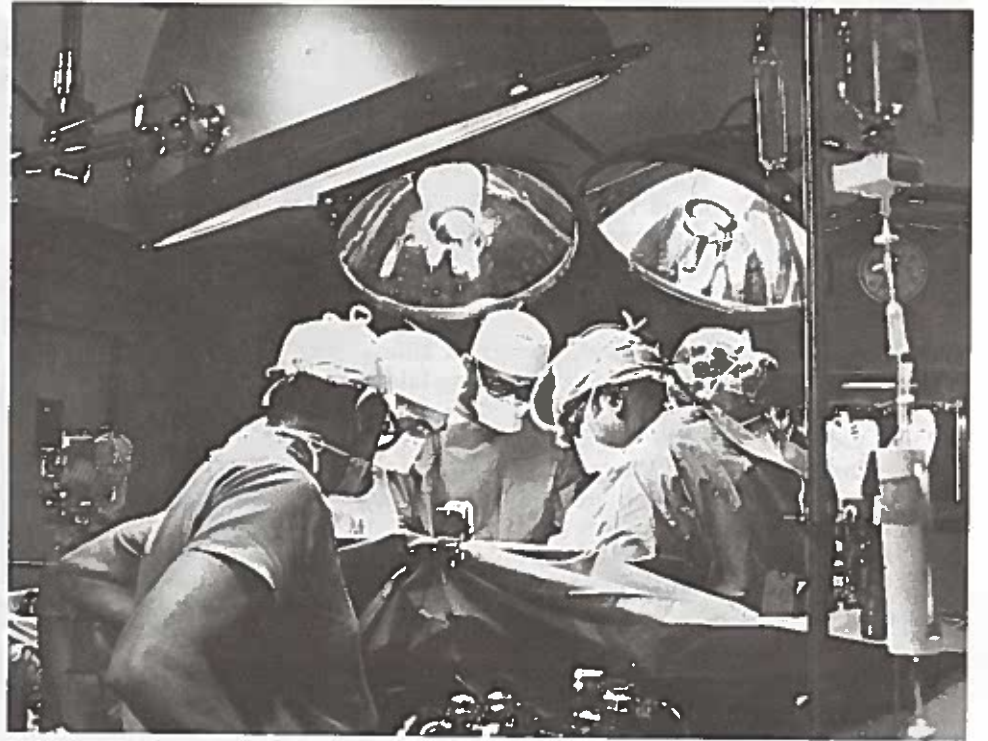
It is uncertain whether or not the F-18 is the best aircraft that could be obtained from industry, the admiral admitted, for "Without a fullscale competition we do not know. However, Navy technical experts agree that in the size, weight, and price class, the F-18 reflects a superior design and the latest technology. They do not believe we could get an appreciably better aircraft than the F-18."

While reviewing cost figures for the Senate group, Houser stated that "For a program of 800 operational combination fighter and attack airplanes, in FY 75 dollars the flyaway cost (of the F-18) is \$5.8 million; the procurement unit cost is \$7.9 million; and the program unit cost for 800 aircraft is \$9.6 million."

Critics of the program would dispute those figures. There is growing evidence, supported by the Office of Management and Budget cost evaluations, that any cost advantage the F-18 might have over the F-14 would be only in the life-cycle costs. If cost estimates were based on buys of 400 aircraft for each model, they insist the initial cost advantage would go to the Tomcat because its research and development costs are already behind it while the F-18's are still ahead ... and should recent history on military aircraft be any criterion, those R&D costs are most likely to go even higher than the present estimates.

Even should the F-18 have a life-cycle cost savings, estimated by the Navy to be about a half-million dollars a year for each plane, they point out that the break-even point at which those operational savings "catch up" with the initial cost differential with the F-14 won't occur until the early 1990s. Some say that's too long to wait.

The debate on the F-18 seems destined to continue. Eventually, however, Congress will be faced with the critical question: Should it approve the F-18, will the nation be paying more for less?



***United Way of Nassau-Suffolk –
one campaign ... for all***



The Long Island community consists of two counties made up of 13 townships, many villages, and countless hamlets between the Queens line and Montauk Point. With an estimated population of 2,800,000 people, the Long Island community has many needs.

Today, there are 112 human service agencies affiliated with the United Way of Nassau-Suffolk. Through these services, your neighbors, friends, family, and even, at times, you receive help and comfort. You can imagine the time and money that would be wasted if each agency had to run its own yearly campaign drive to solicit funds. That's why there is a United Way on Long Island ... "One campaign, once and for all."

Last year, \$3,504,120 in contributions were raised for the United Way of Nassau-Suffolk. This money went to such human service programs as youth agencies; drug-abuse prevention centers; blood banks; child-care centers; convalescent, psychiatric and emotional services; senior citizen programs; nursing, family counseling, and health-care services.

This year, United Way has set a goal of \$3,900,000, and over 15,000 fellow Long Islanders are volunteering their services in the campaign. You, too, can be part of this community effort by contributing to the United Way during the Grumman Aerospace drive that began last Monday and will conclude on Friday, October 24.

While the United Way of Nassau-Suffolk campaign is scheduled for October and November in 1975, there are many from Grumman who volunteer their services throughout the entire year to the various United Way affiliated agencies. A few of them are: Hannah Washington, Phil Boehm, McKinley Banks, and Walter Krudop. You, undoubtedly, know more.

It's working...

There are 16 day-care and Head Start centers affiliated with United Way of Nassau-Suffolk. For many Long Islanders these centers enable them to raise a family and support a family on their own income.

"Day care is beneficial to both the parent and the child," says Hannah Washington, a Grumman secretary presently working on the F-14 program in Plant 15.

"Every morning, I leave my five-year-old son Lionel at the Central Nassau Child Development center in Hicksville and am able to put in a full day's work—with contentment."

As for Lionel, "He spends his day with other children of the same age under the guidance of certified teachers. He's learning more than entry-level courses for first grade ... he's becoming a 'human relations' expert."

Hannah's personal interest in day-care centers goes beyond her own family involvement. She has served on the Board of Directors for the State commissioner in Albany and is presently on the Board of Directors of the Day Care Council of Nassau, which is also an United Way affiliated agency.

"The Council is a liaison between the parents and the individual centers," says Washington. "In other words, it is similar to the PTA in local school districts; only here, the parents are the policy-making body within a particular center."

"The Council also offers assistance to all day-care centers in expanding or enriching their programs," continues Hannah, who has been at Grumman since 1969. "And, there is a counseling service for parents who wish to enter their child in the day care centers."

Hannah's nine-year-old daughter Ursula is also



Hannah Washington visits her five-year-old son Lionel at the Central Nassau Child Development Center in Hicksville.

involved with the United Way. A graduate of the day-care center, Ursula now goes to the neighborhood YMCA directly after her public school day. There she either participates in the various club activities available to all, or completes her homework.

"Thanks to these agencies," states Hannah, "many parents have been given the chance to maintain a job or resume their education. There are no substitutes for independence. Thanks again to the people who give United Way—our programs are working."

'Long way to go'

Since 1941 Walter Krudop has worn a Grumman badge, and though he is a busy man inside the company in the Plant 10 Quality Control lab, he is almost as active on the outside. For 24 of these 34 years, he has been an active participant in the Suffolk chapter of the Association for the Help of Retarded Children (AHRC).

Today, the Suffolk chapter has grown to be the third largest chapter in New York State—a fact that the Executive Board member of AHRC-Suffolk is rather proud of, and rightly so.

"We have come a long way since those first years," states Walter, who also serves on the Board of Governors for New York State, and the Board of Visitors for the Suffolk State Development Center in Melville.

"AHRC now has an 'early intervention' program in which parents of retarded children work with trained professionals from the time of their child's birth. And there is a pre-school program for children ranging in age from 3 to 6 years."

Krudop beams when he mentions the Sheltered Workshop in Hauppauge. "Here retarded adults are given the chance to 'earn a living' by doing contract work. That work includes such tasks as packaging wallets, wrapping handles on ping pong paddles, and assembling and packaging games." His 26-year-old daughter Carol is one of the many adults employed at the Sheltered Workshop.

"The AHRC hostel program follows the same

basic format as 'half-way' houses," continued Krudop. "Now there are two such programs underway in Suffolk, and, with houseparents guiding the way, eight retarded adults are given the opportunity to live on their own. All of them work in the Workshop and they are eventually given the chance to fend for themselves in the various day-to-day routines that we take for granted: shopping, traveling to work, etc. In the near future, we hope to open another hostel and a Sheltered Workshop in Riverhead."

Both Nassau and Suffolk chapters of the Association for the Help of Retarded Children are affiliated with the United Way. In the Suffolk chapter there are 1,900 members, 90 percent of them parents of mentally retarded children. "Though I cited some very important achievements by AHRC over the past 24 years, we still have a long way to go."

Assist over 110,000 scouts

You don't have to read too many pages in your daily newspaper to find headlines like "Crime rate is on the rise;" "Teenage gangs are 'in' ", and "Homocide/suicide stats are climbing." Statistics on society's maladies are always available, but what is being done to prevent it?

The United Way of Nassau-Suffolk supports several youth "character-building" agencies on Long Island. For instance, the YMCA of Long Island, the Melville House, the United Jewish Y's of LI—and the Boy Scouts and Girl Scouts.

At present, there are close to 110,000 local youngsters involved in scouting. McKinley Banks is one of hundreds of adult volunteers in Boy Scouts.

"Scouting is available to all boys ages 8 to 18," says McKinley, who during his 12 years in scouting has been neighborhood coordinator and assistant Babylon district commissioner. "Boys are given the opportunity to explore over 100 fields of interest through the merit badge program. That's a large spectrum of programs ranging from atomic energy to citizenship to



Walter Krudop, Executive Board member of the AHRC in Suffolk County, frequently visits the Sheltered Workshop in Hauppauge.



Bowling is one of the many activities that "Big Brother" Phil Boehm (above) and his nine-year-old "Little Brother" Donald do together. At right, McKinley Banks (L) spends his free time working with Boy Scouts in his neighborhood troop.



oceanography to Indian lore to lifesaving."

Aside from the fact that there are many adult volunteers, operating a full-scale Boy Scout program does cost money. "Helping young boys find out for themselves what their abilities are means the use of every available training device," says Banks. "That also includes the newest audio-visual equipment."

"In Suffolk County, there are two Boy Scout camps: Baiting Hollow, where a scout can spend the entire summer, and Lydensburg, a campsite that is large enough to hold the entire Suffolk County Boy Scout Council of approximately 30,000 scouts," points out Banks, who recently returned to working with his neighborhood troop after relinquishing his post on the Babylon commission when he became a night foreman in Plant 2.

Through the United Way allocations last year, \$257,750 went to both the Boy and Girl Scout programs on Long Island. Says Banks: "These contributions have assisted over 110,000 of our neighborhood youth to participate in a constructive program."

Thanks to you ... it works ... for all of us.

'We're buddies'

Phil Boehm leads four lives. He is a Plant Protection guard who works around-the-clock shifts, he's an officer in the Grumman Rod and Gun Club, a champion pistol shooter for the varsity squad, and an officer for the L.I. Industrial Pistol league. He is also a family man living in Bay Shore with his wife Eileen and his 17-year-old daughter Catharine. And, on Father's Day in 1974, he added another title: Big Brother.

"I was watching television and the Big Brother commercial got to me," says Phil. "So, I decided to act, and I called the number." Big Brothers, Inc. is affiliated with the United Way of Nassau-Suffolk via Catholic Charities.

Big Brothers means more than just an occasional baseball game at Shea Stadium. "We call each other at least twice a week just to see how

things are. Donald and I both come from all-women households," points out Phil, "so it's beneficial to both of us to have a man-to-man relationship."

"Many times when we get together, it's to wash the car, plant seeds in the garden, walk along the beach, fly a kite, discuss his teachers at school and his first schoolyard scrap ... the sky's the limit."

Big Brothers, Inc. also sponsors several outings

Answers to questions about United Way

Why do some United Way agencies charge fees?

Agencies are encouraged to charge fees based on ability to pay so that United Way dollars go as far as possible for people who are unable to pay. In many cases, the agency provides services available through no other community organization and, therefore, serves persons who can and should pay.

Why all those dinners?

Generally, report luncheons or dinners create a competitive spirit and motivate volunteer solicitors to do a complete job. Most such affairs are underwritten by the volunteers themselves or by businesses.

What are United Way allocations used for?

United Way allocations provide services to people through voluntary health, welfare, and character-building agencies active in areas not covered by the government.

Don't government programs reduce the need for United Way services?

No. By law, funds from the Economic Opportunity Act cannot be used for any existing public or private health or human service program.

Suppose I don't like a certain agency?

The United Way believes that every agency does a valid job or it wouldn't be included. If necessary, you could indicate that your donation

a year for all the Big-Little brothers. "We just went to stock car races, and had a great time," recalls Phil. "And then there were the other times that Donald and I ventured to the annual Big Brothers' putt-putt outing," Phil chuckles as he recalls the times with his 'little' brother.

"Donald and I have a good thing going. I make it a point that I don't talk down to him—and he makes it his point not to talk down to me. ... In short, we're buddies."

should be withheld from an agency which you personally do not wish to support.

You may also specify on your payroll deduction card that your contributions be given to a certain agency. Your request will be forwarded to United Way.

How much of what I give goes to help people?

United Way has the lowest possible campaign and administrative cost so that almost all the money raised goes to serve people right in your community. Out of last year's contributions, the campaign operation cost 10.9 percent, and the administration and agency relations programs cost 4.5 percent. So, approximately 85 cents of every dollar collected goes back into the L.I. community.



United Way
OF NASSAU-SUFFOLK

United Way contributors — eligible for prize drawings

The United Way campaign at Grumman Aerospace began October 6. By this time you have already received your "payroll-deduction authorization card" along with a listing of the 112 United Way affiliated agencies and a note from President George Skurla. (If you have misplaced your card, your United Way area representative and your nearest ESO representative have extra cards available.)

To be eligible for the weekly drawings which feature "Shopping Sprees," you must return the completed payroll deduction card to the payroll department. The speediest and easiest method is to send in your payroll deduction card with your timecard.

If you chose to give to the United Way via a one-time cash contribution, present your donation to the Employee Service Office in your plant. The ESO rep will process your entry for the prize drawings.

This year there will be three United Way prize drawings. To qualify for the first week's drawing you must be presently contributing to the United Way, or have signed up this week (Oct. 6-10). You are also eligible for the remaining two drawings.

There will be 10 winners drawn from the barrel on Wednesday, October 15, in the Headquarters lobby. Each winner has a choice of the following prizes valued at \$350:

- Supermarket shopping spree
- Department store shopping spree
- Auto/gas service
- Sylvania 19-in. portable color TV
- GE 18-lb. automatic washing machine
- Waste King undercounter dishwasher
- Caloric 30-in. continuous clean gas range
- Sony 12-in. portable color TV
- GE 20-in. electric range
- Whirlpool 12-cu.-ft. refrigerator
- Meriton stereo system with 8-track turntable

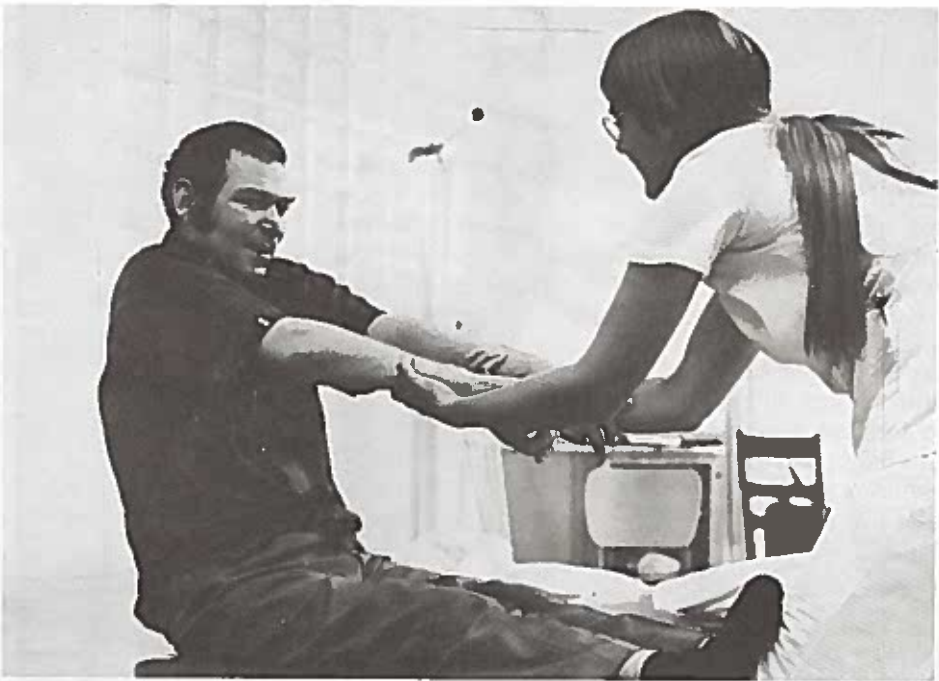
- GE solid state 13-in. color TV
- GE 15-cu.-ft. upright freezer
- All those who qualified for the first drawing, including winners, and those who sign up for United Way during the week of October 13-17 are eligible for the Wednesday, October 22 drawing. Five winners will be picked and will be given a choice of the following, valued at \$750:
- Supermarket shopping spree
- Department store shopping spree
- Auto/gas service
- RCA 25-in. color console TV
- GE 21-cu.-ft. refrigerator/top freezer with ice on door
- Pioneer stereo system with Pioneer speakers and turntable
- Sylvania 25-in. color console TV
- GE self-cleaning 30-in. range
- Caloric 30-in. self-cleaning gas range

Everyone who was eligible for the second campaign drawing (including winners) is also eligible for the third and final drawing on Wednesday, October 29, in which the prizes are valued at \$1,200. People who sign up during the drive's last week, October 20-24, are also included. Three lucky United Way contributors will be winners, and will have their pick of the following:

- Department store shopping spree
- Five days and six nights in Bermuda for two plus \$500 in Travelers checks
- Supermarket shopping spree
- Auto/gas service
- Magnavox color combination, 25-in. TV with stereo system
- GE refrigerator, 24-cu.-ft., side-by-side, with ice and water on door

As an extra gesture of thanks to "Generous Giving" contributors to the United Way, those donors who win a prize or prizes will be awarded an extra \$250-value prize.

All winners will be announced over the PA system and on NEWS-BOARD after each drawing. The earlier you sign up the greater your chances are of winning.



Over 100 United Way agencies

- | | |
|---|---|
| <ul style="list-style-type: none"> Alliance of Minority Group Leaders American Red Cross — Nassau; Suffolk American Social Health Association Association for Children with Learning Disabilities Association for the Help of Retarded Children — Nassau; Suffolk Baldwin Community House (BCADA)* Boy Scouts of America — Nassau; Suffolk Catholic Charities Central Island Community Mental Health Center Community Organization for Parents and Youth, Inc.* Concepts for Narcotics Prevention, Inc.* Day Care Council of Nassau County Dorothy K. Robin Child Care Center Family Service Association of Nassau County Family Service League, Suffolk Farmingdale Head Start First Baptist Church Community Day Care Center Five Towns Head Start Foster Grandparent Program Freeport Head Start Girl Scout Councils — Mid-Island; Nassau; Suffolk Glen Cove Day Care Center Harbor Day Care Center Health and Welfare Council of Nassau County Hempstead Head Start Jewish Association for Services for the Aged Jewish Community Services of L.I. Kidney Foundation of New York Long Beach Head Start L.I. Health and Hospital Planning Council L.I. Hearing and Speech Society L.I. Jewish-Hillside Medical Center L.I. Sickle Cell Project Lutheran Community Services Manhasset-Great Neck Head Start Melville House* Mental Health Association of Nassau Mobilized Community Resources, Inc.* Nassau Economic Opportunity Commission* Nassau-Suffolk Comprehensive Health Planning Council, Inc. National Urban League N.Y. Diabetes Association North Shore Child Guidance Center Parents of Special Child-Adults Inc.* Pre-Schooler's Workshop* | <ul style="list-style-type: none"> Rockville Centre Head Start Roosevelt Head Start Roslyn Neighborhood Day Care Center* Salvation Army Skills Unlimited Smith Haven Ministries Smithtown Mental Health Center, Inc.* Society of St. Vincent de Paul* South Avenue Day Care Center Southeast Nassau Guidance Center South Shore Guild Guidance Center Suffolk Child Development Center Suffolk Community Council Suffolk County Hearing and Speech Center* Suffolk Community Development Corp.* Sunrise Psychiatric Clinic, Inc.* The Rehabilitation Institute* Travelers Aid-International Social Service of America United Cerebral Palsy Association, Nassau* United Jewish Y's of Long Island United Service Organizations, Inc. Walkabout, Inc.* Westbury Head Start West Nassau Mental Health Center Wyandanch Community Development Corporation for Youth Services YMCA of Long Island Youth Development Program Youth Direction Council |
|---|---|
- (*Admitted in 1975, will receive allocations in 1976)
- ### Hospitals
- Brookhaven Memorial Hospital
 - Central Suffolk Hospital
 - Community Hospital at Glen Cove
 - Eastern L.I. Hospital
 - Franklin General Hospital
 - Good Samaritan Hospital
 - Huntington Hospital
 - Long Beach Memorial Hospital
 - Mather Memorial Hospital
 - Mercy Hospital
 - Nassau Hospital
 - North Shore University Hospital
 - St. Charles Hospital
 - St. John's Smithtown Hospital
 - Southampton Hospital
 - South Nassau Communities Hospital
 - Southside Hospital.
- (Note: Hospitals listed above are those affiliated with United Way at this printing.)



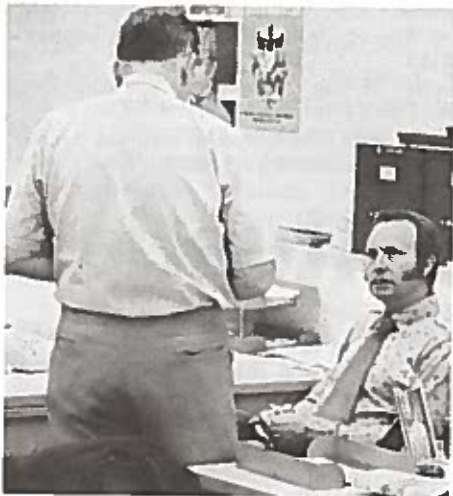
Coast staff plays key role in subcontracts



Over \$170 million was pumped into the West Coast economy last year in Grumman subcontracts and that figure is growing, reports John Norris, manager of Grumman's West Coast office. Making sure that those millions are well spent is the major part of a multi-faceted job for Norris and the rest of the West Coast staff, who work out of a suite of offices overlooking Los Angeles' airport.

And if those offices have a certain deserted look occasionally that's not surprising either, says Norris. "The majority of our people spend no more than a few hours a week in the office," he says. "We are in the procurement support business, and most of their time is spent on the road visiting the hundreds of Grumman suppliers who play such a vital role in the success of the F-14 and the many other Grumman programs."

As a result, the Grumman field rep's job on the Coast involves travel, and lots of it. The territory they cover stretches a couple of thousand miles from northern Washington to San Diego and points east, though most of the Grumman subcontractors are located in Southern California. "But even in the L.A. area," says Ray



Barger, administrator for the West Coast office, "our reps frequently have to cover a lot of ground, driving a couple of hundred miles in one day, to take care of L.A. and its environs."

The reps' responsibility range is almost as great. "We cover everything—from manufacturers of a \$20 part to a multi-million dollar weapons system," says Barger. "Every aircraft component is equally vital to the success of the final product," he adds, "because an F-14 or A-6 can be held up just as easily by a shortage of the right valve as by a major system failure."

All of the reps are basically trouble-shooters, and that role begins even before a contract is awarded, Norris adds. "First Bethpage specs out an item and gives it to a seller," he says, "If the product meets our quality, cost and schedule requirements, then we're home free. But if specs can't be met, our engineers here may be required to work out the solution with Bethpage, by either fixing the part, or checking the specs to see if they're unrealistic and can be eased. On the other hand, if the product cannot meet Grumman's quality standards, our Quality Control section will pick it up and work out a solution with Engineering."

The recognition and resolution of most problems on the spot is the secret of the West Coast staff's effectiveness. "Immediate, on-the-spot solutions save critical time and dollars," says Norris, "and that's the whole reason for our being here."

Further, the L.A. office has developed over the years a close working relationship among staff members that avoids a "that's not my job" mentality. "We do what has to be done here despite job descriptions," says Barger, "A quality control rep may find himself involved with a procurement problem while

visiting a local seller. Unless there happens to be someone from procurement right there at the time, the quality control rep will begin to get the facts on the problem himself while notifying procurement back at the West Coast Office."

The job also requires a close working relationship with the sellers themselves. "We keep in close touch with our suppliers," says Norris, "so that we can anticipate a problem as much as possible before it develops. We learn to recognize the initial symptoms of what might eventually become a serious problem if allowed to go unchecked."

Says Purchasing Manager Art Gerdes: "We've learned that a company can be made or broken by its people. We watch people very closely. When they start shuffling their top personnel, we start watching them." One seller, he says, fired three key executives within a few weeks. "As soon as that happened we kept close tabs on the place. Unfortunately our concern turned out to be well-founded."

Some firms, he says, take on too big a work load or try to handle a job that's just too difficult for them to produce. "In those cases we try to steer clear and not award a contract that may be bid unrealistically."

Fortunately, serious problems are a rarity, emphasizes Norris. "Most of our dealings with sellers are routine. They've been in their business for years and can be relied upon to produce a superior product at a reasonable cost." Some sellers in fact, see their Grumman rep only infrequently. "They've built such a solid reputation with us and within the industry that we look in only occasionally for a routine check."

But for most jobs, especially the more complex ones, Norris sees the assistance of the Grumman rep as



At Teledyne, Grumman Quality Control rep George Fischer (seated) checks output.

invaluable. He cites as an example one seller, a foundry, which ran into a knotty technical problem that required the special skills of a metallurgist. The firm itself was not big enough to employ a full-time metallurgist so the West Coast office supplied them with one of its own. The problem was quickly solved.

"We're very proud of what we've been doing here to help people," says Gerdes, but he points out that this help is a two-way street. Some of the sellers themselves bring an expertise and production know-how to a job that would require a prohibitive investment if Grumman attempted to duplicate the work on its own.

For example, Grumman has traditionally relied on machined parts for aircraft production. In the last

(Continued on page 10)



Subcontracts rep Dick Edwards is Grumman resident at Teledyne.

L.A. Office: Grumman's eyes and ears on Coast

(Continued from page 9)

few years, however, forging and casting technology has mushroomed on the West Coast, allowing production of better-formed parts at a lower cost. "Now a lot of the work on the F-14 relies on forging and casting—mostly from West Coast sellers," says Norris. "Grumman is therefore freed to concentrate its expertise on those areas we do best—airframe and system design and integration."

Though working with sellers is the prime responsibility of those in the West Coast office, they also play an essential role in serving many of the Field Service sites. "We handle all the Grumman procurement for Grumman offices at NAS Miramar and NAS Pt. Mugu, as well as acting as general liaison with those facilities," says Norris.

The office also serves as the representative for Grumman Corporation subsidiaries, particularly Grumman Allied. Grumman Data Systems, Grumman Health Systems, and Grumman Ecosystem each have their own representatives in the L.A. office. For all these subsidiaries the reason for a West Coast presence is simple: expanded sales.

Acting as Grumman's sales arm in the west is Al Rogers, who manages the general corporate marketing effort. Rogers works closely with Customer Requirements and program people in Bethpage to develop West Coast markets for Grumman. "We work hand-in-glove with Grumman back east to develop commercial sales." At present Rogers is involved with a range of products from solar panels to the Nozzle Pump Operator.

SAMSO liaison

A very important function of the West Coast staff is the work the office performs as liaison with the Air Force's SAMSO (Space and Missile Systems Organization) for Vice President Tom Kelly's Space Programs Group.

"We're contributing to a SAMSO bid right now for an advanced satellite system," says Bob Shutak, Department of Defense Space Projects Manager. "Because of our location here near the customer we can keep the home office up-to-date on a continuous basis during the bidding process."

In fact, the hallmark of the West Coast office and its Grumman reps is versatility, states Barger. "We have people who can step into a variety of different situations and be able to handle them all. We need that kind of versatility in a small office that is responsible for a multitude of assignments."

"We can serve in many different areas," says Barger, "because the people here really know the Coast and its industry." Most have years of experience in the area, he says, and that is usually combined with previous experience with either Grumman at Bethpage or with a Coast contractor.

Being a West Coast rep, "takes a lot of savvy and know-how, as well as a strong PR sense," says Engineering Manager Pete Layton. "You've got to be a people person. In our job a pure scientist just won't hack it." Most especially, says Norris, "You've got to be able to motivate the guy on the shop floor and also be able to talk to the company president. And you have to know when to yell to New York for help."

The life of a West Coast rep is not an easy one, he says, what with constant travel and irregular hours, "but it's one of the most satisfying I know. You're working with your peers, serving as the 'man-in-the-middle,' the one who has to get the job done."

Travelling made easy

If you're planning a trip west, you may find that a lot of your work can be done through the West Coast office in Los Angeles. In many cases that office may be able to handle the job entirely, freeing you for other tasks closer to home.

Company policy requires that you get in contact with that office and the appropriate section there, before you go. That office will then advise you if you will need additional assistance in the area or if it can be handled locally.

There is someone on hand at the L.A. office to take care of most requirements. You can contact John Norris, manager of the West Coast Office, Assistant Manager Al Rogers or Ray Barger, office administrator. If necessary they can put you in touch with any of the several functional areas in the office, including: Engineering, Quality Control, Product Manufacturing, Purchasing, Subcontracts, and Publications.

The West Coast office can be reached at 56-(213) 322-6990. Office hours are 7 a.m. to 4:30 p.m. (10 a.m. to 7:30 p.m. New York time).

Navy greets 3rd century

(Continued from page 2)

sights, controllable pitch propellers, and hydraulic arresting gear were also developed and tested. The first retractable landing gear on a Navy plane appeared early in the '30's with the advent of Grumman's XFF-1 aircraft, the first airplane built by Grumman.

By the end of the decade the paramount importance of naval air power had been demonstrated again and again in carrier exercises. Most significant was the complete success of mock training attacks on the Pacific Fleet's home base, Pearl Harbor. This theoretical demonstration attracted scant notice outside the world of naval aviation and the lesson had to be taught all over again by the Japanese on December 7, 1941.

The Japanese surprise attack on Pearl Harbor was devastatingly effective, the Japanese planes sinking all eight of the great battleships berthed at Pearl. Fortunately the U.S. Navy's own naval air arm was saved by a fluke. Of the six carriers in the Pacific Fleet, not a single one happened to be berthed at Pearl at the time of the attack.

The preservation of the U.S. carriers proved vital six months later in the Battle of the Coral Sea where the U.S. fleet stopped the Japanese advance on Australia despite heavy losses. This battle was the first naval engagement fought entirely by aircraft, the opposing fleets never coming within sight of each other.

The Battle of Midway a month later was fought in a similar manner. At Midway the U.S. dive bombers had a devastating effect on a fleet already weakened by the losses at Coral Sea. At Midway the Imperial Navy lost four carriers to the Navy's one (the Yorktown). The battle is considered the turning point of the war in the Pacific and one of the great decisive battles of all time.

In the post-WWII world the importance of the carrier is as great as ever, as the conflicts in Korea and Vietnam have proved. But the new carriers, like the nuclear powered Enterprise and the newly commissioned Nimitz, show how far naval aviation has come since the days of the Langley. Just as dramatic has been the improvement in the aircraft themselves, like the A-6s, EA-6s, E-2s, and, of course, the new F-14s.

The Navy of the future will have to continue its tradition of "no place for second best," for in the Soviet navy it is confronted by the greatest challenge to U.S. naval supremacy since the close of World War II.

About the cover ...

A retrospective look at the Navy's First 200 years is the theme of this issue of Plane News.

At top is the Grumman Wildcat, hero of the war in the Pacific. Pictured below are some of the men who helped build America's Navy: Matthew Galbraith Perry, George Bancroft, John Paul Jones and Benjamin Stoddert.

calendar

Aikido Club: Every Mon. & Wed., 5:15 p.m., Pl. 35 cafe; guests welcome. Mike Stock, x6256/Bob Bauman, x84636.

Amateur Radio Club: Wed., Oct. 15, 5 p.m., radio shack, roof of Pl. 5; local chapter; guests welcome. Emmett Goodman, x87125.

American Institute of Aeronautics & Astronautics: Wed., Oct. 22, cocktails 5:30 p.m., dinner 6:30 p.m., speaker 7:30 p.m., Manor East, 201 Jerusalem Ave., Massapequa; L.I. Section; guest speaker: Thomas J. Kelly, vice president, director, space programs, Grumman — "Space Activities at Grumman;" guests welcome. George Frankel, x9113.

American Institute of Industrial Engineers: Tues., Oct. 14, cocktails 6 p.m., dinner 6:30 p.m., seminar 8 p.m., Hofstra University Alumni Club, Hempstead; guest speaker: William Going, Grumman — "Manufacturing Support Design-to-Cost;" guests welcome. John Cosenza, x87501/2.

American Production & Inventory Control Society: Tues., Oct. 14, 6 p.m., Maine Maid Inn, Jericho Tpke. & Rte. 106, Jericho; local chapter; guest speaker: William Sandman, Sandman Associates — "Shop Floor Control;" guests welcome. Norm Heilweil, x1855.

American Society of Mechanical Engineers: Wed., Oct. 15, cocktails 6 p.m., dinner 7 p.m., speaker 8 p.m., Holiday Manor, Hicksville Rd., Bethpage; L.I. Section; speaker from Computervision Corp. — "Use of Computers in Design;" guests welcome. Larry Hahn, x1916.

Coin Club (Bethpage): Wed., Oct. 22, 12:05 p.m., vendor conf. rms., Pl. 25; informal lunchtime meeting. Ken Hale, x1936.

Dance Club: Every Tues., 8:30-10:00 p.m., St. Francis of Assisi, Greenlawn. Len Luke, x6292/87422.

GAC Divers: Thurs., Oct. 23, 5 p.m., Pl. 28 auditorium; gen. membership meeting; guests welcome. Steve Failer, x86338.

Grumman Toastmasters Club: Wed., Oct. 15, 5 p.m., conf. rm. 1C, Pl. 25; local chapter; reg. meeting; guests welcome. Frank Locascio, x3683.

Retiree Club: Wed., Oct. 29, 12 noon, Holiday Manor; fall luncheon. Pete Looney, x2133.

Society of Mfg'g. Engineers: (see American Production & Inventory Control Society).

Stamp Club: First 3 Wed. of each mo. 5 p.m., Pl. 30 cafe. Steve Hoops, x3926.

obituaries

ALFRED W. BRUNNER of Jigs and Fixtures, Plant 2, died September 21 at the age of 56. He had been with the company since 1965 and lived at 46 Eldorado Blvd., Plainview.

JOHN H. JONES of Mechanical Inspection, Plant 1, died September 21 at the age of 57. He had been with Grumman since 1947 and lived at 647 N. Chicot Avenue, West Islip.

president's report

(Continued from page 3)

research and development, etc.) and the fact that the first of these planes won't become operational until 1982, many analysts now believe that any of those supposed operational savings won't become apparent until the early 1990s, if then. Simply put, it just doesn't add up!

And there have been other misconceptions in the F-14 vs F-18 confrontation. Recently there were a number of newspaper accounts of a reported F-14 "cost growth." What wasn't made clear was that this increase in program cost is associated with only the last 111 F-14s of the current Navy buy of 390, and is primarily the result of the Government's decision to stretch out production from 1978 to 1981. If the same 111 aircraft were to be procured at the present six-per-month rate instead of a diminishing rate from 1978-81, a program savings of \$600 million would result.

Others have implied that the F-14 couldn't operate from the proposed "mini" carriers. As a matter of fact, the F-14 was designed to operate from carriers like the Midway, which is about the same size—approximately 60,000 tons displacement—frequently quoted for the mini-carriers. What is open to question is whether or not the F-18 will be able to fly off of and land on the new carriers since it was designed to operate from the larger 78,000-ton Forrestal class ... and even on that type of carrier its present projected carrier suitability has been rated "marginal" by the Naval Air Systems Command.

Whereas, the F-18 is still a "paper airplane" (to quote Senator Goldwater), with its cost and performance still open to debate, the F-14 is here now, is operationally deployed, and performing in an outstanding fashion.

Let's look at the F-14's record:

- It's the only aircraft in the U.S. inventory that can accommodate the AWG-9 - Phoenix weapon system;

- The Tomcat's extraordinary six-shot missile system is deadly against high- or low-flying planes and cruise missiles at ranges up to and over 100 miles;

- In all, the F-14 program has accumulated nearly 28,300 flights, 44,300 flight hours, and 5,700 carrier landings, and four Navy squadrons have already deployed with the Tomcat.

- F-14 cost figures are real—not projections on a drawing board—be-

cause it's in production and we've been able to drive the costs down by learning how to build them faster and better and have already delivered 163 to date.

- And, even more important, the Navy pilots who have deployed with the Tomcat think it's a super flying machine. To be more specific, Chief of Naval Operations Adm. James L. Holloway III recently stated before a Congressional committee that the F-14 is "unequaled in its ability to perform the Navy's fighter missions."

We can understand the Department of Defense's desire to get a good, low-cost fighter but based on the Government's own figures, the "half-cost", "almost as good" fighter will not be achieved. It is very clear now that the F-18 program won't be low-cost at all but will, in fact, cost the nation's taxpayers billions of dollars more than first estimated. Is it wise then to spend our limited defense dollars to buy F-18s—a lesser defensive capability that costs more? Or to put it another way: "Why pay more for less?"

Is anyone listening to our argument? Until recently, there were very few members of Congress who questioned the credibility of all the wonderful things promised for the F-18. But the number of skeptics in Congress is growing. Although funds for the development of the lightweight fighter were continued by vote in the House of Representatives last week, the spirited debate that preceded the action indicates to us that there is a growing concern about the true cost figures on the F-18. In the weeks ahead, members of various Senate committees and eventually the entire Senate will be asked to register their approval or disapproval of continuing the F-18 program. As taxpayers, it is imperative that all of us understand these issues and voice our concern.

In summary, as your management continues to vigorously carry our message to Washington, I would like to remind you that it is mandatory for all of us to continue to focus our total energies on producing quality products, reducing operating costs, and delivering our aircraft on schedule in order to avoid any criticism by our customers and any detractors of our own in-house performance. We're fighting to insure our nation's defense posture—and our own company's economic future—well into the 80s. To be successful in that endeavor, it will require the best effort from each one of us. Let's do it!



Best of show. Dahlia champ Karl Hagen (2nd from right) receives Test of Show award from ESO's Gus D'Errico. Other top winners from left are: Dick Brummer, John Gatti, Charlie Chlanda, Dot Kappenberg, and Otto Schineis. (Photo by Marie Trimborn).

Hagen's dahlias earn top prize in flower forum season finale

In the face of heavy rains and winds, the last flower show of the year blossomed gloriously before garden fanciers and other spectators in the Plant 30 cafeteria on Wednesday, September 24. The show was actually a combined flower, fruit and vegetable display in keeping with its traditional fall harvest theme. It featured a four-foot squash and immense, perfect dahlias that had even the uninitiated fascinated. Best in Show was won by Karl Hagen, a Grumman retiree, who exhibited a lush dahlia display.

According to show manager Dot Kappenberg, the Grumman Garden Forum was fortunate in having so many blooms on exhibit considering the heavy downpour that deluged the area in the days before the show. Many would-be exhibitors spent the evening before armed with flashlight, shears and umbrella in an attempt to salvage what they could from rain soaked backyard plots. The lucky ones, she says, were able to use flowers that had been picked earlier and stored in special refrigerators.

"We also found there were a lot more people entering vegetables this year," she adds. Among the big winners in that category were Dick Brummer for his perfect, plum-colored eggplant and John Gatti's eight-inch long frying peppers. Each received a first prize.

Other first prize winners were Otto Schineis and Karl Hagen for their dahlias and John Steffens, Pete Haring, and Dot Kappenberg for seasonal material and arrangements.

Flower show veteran, Charlie Chlanda, made a clean sweep of the fruit category, winning all three prizes with his impressive apple entries.

Though this was the last show of the year, Dot Kappenberg emphasizes that now is the time to start thinking about next year's garden.

Winners of the 1975 Dahlia, Fruits, Vegetables and Seasonal Material Show are:

Single dahlia — (1) Otto Schineis; (2) Karl Hagen and Schineis; (3) Hagen; (HM) Hagen
Single dahlia min./pom pom — (1) Hagen; (2) Joan McGuckin; (3) Roy Goddard; (HM) Hagen

Dahlia assortment — (1) Hagen; (2) Dot Kappenberg; (3) Goddard; (HM) Frank Kirby

Seasonal assortment — (1) John Steffens; (2) Mike Smith; (3) Frank Sadowski and Kappenberg; (HM) Kappenberg

Seasonal material — (1) Pete Haring; (2) Smith; (3) Sadowski and Kappenberg; (HM) Kappenberg

Arrangements — (1, 2, HM) Kappenberg; (3) Hagen

Fruits — (1, 2, 3) Charles Chlanda

Vegetables — (1) Dick Brummer and John Gatti; (2, 3) Charles Morris; (HM) Vic Matuza and Morris

GRUMMAN plane news

Published twice a month for the employees of Grumman Aerospace Corporation, Bethpage, N. Y. 11714, as a function of the Public Affairs Dept., Vice President J. B. Rettallata, director.

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Investment Plan changes allow greater flexibility

Participants in the Grumman Employee Investment Plan will soon receive personal notification of several changes that became effective in the Plan on October 1, 1975. All persons who have completed a 12-month period of service with the company of not less than 1,000 hours of employment are eligible to join the Investment Plan. As a participant, an individual may contribute up to 10% of his or her base salary to the Plan, with Grumman providing a matching contribution of 50% of the first 4% of that amount in Company stock. After only three months with the company, a person may join the Plan but company matching contributions will not begin until the 12-month period of service has been attained.

The key change in the Plan is one that allows a participant to re-invest (or re-direct), once a year, the market value of all past contributions among the Fixed Income Fund, Equity Fund, or Company Stock Fund. Formerly, only future contributions were permitted to be re-invested. Fixed Income includes bonds, preferred stocks, and securities other

than Grumman securities; Equity includes common stock and other equity investments with the principal exception of Grumman common stock; and Company Stock involves only Grumman Common Stock.

Other changes voted by the Grumman Corporation Board of Directors were: a revision to make the Plan Year the same as the calendar year—formerly, the Plan Year had run from June 1 through May 31; also, Company contributions to the Plan can now be made with authorized but unissued shares of the Corporation's Common Stock, and it eliminated the forfeiture provision for withdrawals within the first two years of Plan participation.

Additional revisions to the Grumman Employee Investment Plan were made as a result of the Employee Retirement Income Security Act. Changes to the plan made in conformance to ERISA were:

- Redefining the one-year eligibility requirement for matching company contribution to "the completion of a 12-month period of not less than 1,000 hours employment";

- Providing a former employee, who is subsequently re-employed within a one-year period, the opportunity to repay any lump sum distributions taken from the Plan at the time of termination, and thereby to recover any unvested forfeited shares;

- Providing former employees with the opportunity to leave their contributions in the Plan, if such contributions total \$1,750 or more, for any period up to their reaching age 72 (or earlier death).

In announcing the changes, Board Chairman Clint Towl pointed out that the Federal Government had yet to issue all of the necessary regulations to implement the ERISA legislation and that additional changes may become necessary in the future to keep the Investment Plan in conformance with the new law.

STA makes first flight

Grumman's Space Shuttle Training Aircraft made its maiden flight September 29. The aircraft is one of two modified Grumman American Aviation-built Gulfstream II corporate jets that will be used as part-task trainers to instruct the flight crew in the critical descent and landing phase of the Space Shuttle Orbiter. The National Aeronautics and Space Administration (NASA) awarded Grumman the \$26.3 million contract for two aircraft in December 1973.

The Space Shuttle Training Aircraft are modified to simulate the Shuttle Orbiter's cockpit, motion and visual cues and handling qualities. In flight, the STA will duplicate the Orbiter's atmospheric descent trajectory from approximately 35,000 feet altitude to its runway landing. Other structural modifications to the Gulfstream II include direct lift flaps to simulate the Orbiter's expected attitude and heave (vertical) control, and the installation of side force controls positioned under the wing to simulate expected sideways movement of the spacecraft.

The first aircraft will be delivered to NASA's Johnson Space Center in Houston early next year.

The Space Shuttle Orbiter, the first reusable space vehicle, is a space airplane which can fly through the atmosphere and land

like conventional aircraft. It has the capability of carrying a variety of payloads into orbit as well as retrieving them for return to earth.

Most of the United States' efforts in space during the 1980's and 1990's will in some way be related to the Space Shuttle transportation system. The system will significantly reduce the cost because of its reusability, while at the same time increasing the effectiveness of using space for commercial, scientific and defense needs, say NASA officials.



Bloomin' success. Ellie Powers, Louie Jackson, and Bunny Davics (R) have spent this past summer cultivating a small plot outside the Plant 77 wireloom trailer where they work. After spending numerous hours during lunchtime and after work, they have harvested a crop of watermelon, tomatoes, radishes, string beans, and squash.

GRUMMAN plane news

ADDRESS CORRECTION REQUESTED

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BETHPAGE, N.Y. 11714
PERMIT NO. 264

Vol. 34, No. 18, October 10, 1975, Bethpage, N.Y. 11714